

Pump and Pumping Equipment Manufacturing: 2002

Issued December 2004

EC02-311-333911 (RV)

2002 Economic Census

Manufacturing

Industry Series



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U.S. Department of Commerce
Economics and Statistics Administration
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-- Not applicable for this report.

Table 1. Historical Statistics for the Industry: 2002 and Earlier Years

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry and year ¹	Com- panies ²	All estab- lish- ments ³	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
			Number ⁴	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
333911, Pump and pumping equipment manufacturing	2002.. 399	487	32 302	1 408 032	18 476	36 715	649 119	3 624 907	3 421 203	7 071 482	148 724
	2001.. N	N	32 037	1 362 095	17 963	36 535	611 626	3 646 361	3 631 824	7 378 361	186 513
	2000.. N	N	33 089	1 409 839	18 532	38 476	631 555	3 889 926	3 743 746	7 629 764	237 281
	1999.. N	N	34 840	1 432 074	19 525	39 860	639 052	3 595 170	3 509 380	7 210 159	190 467
	1998.. N	N	37 234	1 491 460	21 484	44 374	707 903	3 720 962	3 957 229	7 552 338	227 359
	1997.. 406	487	36 020	1 402 147	20 774	42 945	663 726	3 403 918	3 345 583	6 735 133	187 479

¹Statistics presented for years ending in 2 and 7 are census data. Interim census years are derived in a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures (ASM).

²For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

³Includes establishments with payroll at any time during the year.

⁴Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 2. Industry Statistics for Selected States: 2002

[States that are a disclosure or with less than 100 employees are not shown. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

Industry and geographic area	E ¹	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ³	Hours (1,000)	Wages (\$1,000)				
333911, Pump and pumping equipment manufacturing												
United States	2	487	237	32 302	1 408 032	18 476	36 715	649 119	3 624 907	3 421 203	7 071 482	'148 724
California	2	63	29	3 742	135 183	2 315	4 395	58 837	385 276	425 913	812 609	'22 774
Colorado	—	5	3	494	31 004	218	481	10 912	89 683	44 042	126 231	'3 671
Florida	6	20	8	512	22 756	269	573	9 304	63 676	59 386	123 215	'2 481
Georgia	—	11	6	905	35 914	617	1 301	20 799	86 626	79 713	166 984	'2 450
Illinois	—	24	17	1 960	95 159	1 147	2 541	44 692	227 530	188 251	420 838	'9 588
Massachusetts	—	8	3	410	18 299	278	514	9 498	64 350	43 985	107 097	'1 351
Michigan	—	13	8	1 271	58 765	664	1 054	23 047	110 581	67 333	174 458	'3 396
Minnesota	—	7	4	960	53 496	593	1 195	28 216	169 418	116 752	297 104	'4 298
Missouri	1	9	2	169	7 761	86	161	3 001	21 125	14 405	35 213	'589
North Carolina	—	7	4	765	25 833	602	1 313	16 972	166 554	70 360	229 308	'1 426
Ohio	1	30	18	3 564	135 398	2 125	4 067	68 439	288 762	328 238	644 278	'9 713
Oklahoma	3	25	14	2 690	111 148	1 411	3 154	41 138	416 215	336 608	747 083	'12 669
Oregon	1	7	5	434	20 202	200	350	8 091	32 515	87 723	122 109	'1 272
Texas	4	56	28	2 664	122 338	1 638	2 908	67 045	275 928	267 257	555 978	'12 869
Wisconsin	2	19	10	1 963	95 675	1 064	2 098	44 842	259 786	270 794	550 050	'8 612

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 3. Detailed Statistics by Industry: 2002

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Item	Value
333911, Pump and pumping equipment manufacturing	
Companies ¹	number.. 399
All establishments ²	number.. 487
Establishments with 1 to 19 employees	number.. 250
Establishments with 20 to 99 employees	number.. 147
Establishments with 100 employees or more	number.. 90
All employees ³	number.. 32 302
Total compensation	\$1,000.. 1 772 687
Annual payroll	\$1,000.. 1 408 032
Total fringe benefits	\$1,000.. 364 655
Production workers, average for year	number.. 18 476
Production workers on March 12	number.. 18 984
Production workers on May 12	number.. 18 789
Production workers on August 12	number.. 18 230
Production workers on November 12	number.. 17 866
Production worker hours	\$1,000.. 36 715
Production worker wages	\$1,000.. 649 119
Total cost of materials	\$1,000.. 3 421 203
Materials, parts, containers, packaging, etc., used	\$1,000.. 2 917 637
Resales	\$1,000.. 359 026
Purchased fuels	\$1,000.. 12 497
Purchased electricity	\$1,000.. 51 439
Contract work	\$1,000.. 80 604
Quantity of electricity purchased for heat and power	1,000 kWh.. 862 536
Quantity of electricity generated less sold for heat and power	1,000 kWh.. -
Total value of shipments	\$1,000.. 7 071 482
Primary products value of shipments	\$1,000.. 6 167 723
Secondary products value of shipments	\$1,000.. 375 770
Total miscellaneous receipts	\$1,000.. 527 989
Value of resales	\$1,000.. 436 910
Contract receipts	\$1,000.. D
Other miscellaneous receipts	\$1,000.. D
Primary products specialization ratio	percent.. 94
Value of primary products shipments made in all industries	\$1,000.. 6 493 599
Value of primary products shipments made in this industry	\$1,000.. 6 167 723
Value of primary products shipments made in other industries	\$1,000.. 325 876
Coverage ratio	percent.. 95
Value added	\$1,000.. 3 624 907
Total inventories, beginning of year	\$1,000.. 1 270 889
Finished goods inventories	\$1,000.. 556 954
Work-in-process inventories	\$1,000.. 208 260
Materials and supplies inventories	\$1,000.. 506 211
Total inventories, end of year	\$1,000.. 1 236 319
Finished goods inventories	\$1,000.. 519 099
Work-in-process inventories	\$1,000.. 220 743
Materials and supplies inventories	\$1,000.. 497 013
Gross value of depreciable assets (acquisition costs) at beginning of year	\$1,000.. '2 356 747
Total capital expenditures (new and used)	\$1,000.. '148 724
Buildings and other structures (new and used)	\$1,000.. '23 276
Machinery and equipment (new and used)	\$1,000.. '125 448
Automobiles, trucks, etc., for highway use	\$1,000.. '7 221
Computers and peripheral data processing equipment	\$1,000.. '18 604
All other expenditures for machinery and equipment	\$1,000.. '99 623
Total retirements	\$1,000.. '133 482
Gross value of depreciable assets at end of year	\$1,000.. '2 371 989
Depreciation charges during year	\$1,000.. '151 668
Total rental payments	\$1,000.. 62 153
Buildings and other structures	\$1,000.. 30 024
Machinery and equipment	\$1,000.. 32 129
Total other expenses ⁴	\$1,000.. 387 754
Response coverage ratio ⁵	percent.. 72
Repair and maintenance services of buildings and/or machinery ⁴	\$1,000.. 34 368
Communications services ⁴	\$1,000.. 14 921
Legal services ⁴	\$1,000.. 9 785
Accounting, auditing, and bookkeeping services ⁴	\$1,000.. 4 351
Advertising and promotional services ⁴	\$1,000.. 33 702
Expensed computer hardware and supplies and purchased computer services ⁴	\$1,000.. 12 605
Refuse removal (including hazardous waste) services ⁴	\$1,000.. 3 939
Management consulting and administrative services ⁴	\$1,000.. 45 133
Taxes and license fees ⁴	\$1,000.. 12 664
All other expenses ⁴	\$1,000.. 216 287

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Based on Annual Survey of Manufactures (ASM) sample data.

⁵A response coverage ratio is derived for this item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight) for those Annual Survey of Manufactures (ASM) establishments that reported to the weighted total employment for all ASM establishments classified in this industry.

Note 1: The amounts shown for other expenses reflect only those services that establishments purchase from other companies.

Note 2: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 4. Industry Statistics by Employment Size: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Employment size class	E ¹	All establishments ²	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number ³	Payroll (\$1,000)	Number ³	Hours (1,000)	Wages (\$1,000)				
333911, Pump and pumping equipment manufacturing											
All establishments	2	487	32 302	1 408 032	18 476	36 715	649 119	3 624 907	3 421 203	7 071 482	'148 724
Establishments with—											
1 to 4 employees	9	107	236	9 290	128	217	3 957	19 665	24 009	43 649	'681
5 to 9 employees	8	71	490	21 481	265	533	9 324	49 564	56 435	106 227	'1 572
10 to 19 employees	6	72	1 008	45 440	562	1 124	20 256	98 446	110 083	209 454	'4 167
20 to 49 employees	3	97	3 026	129 905	1 631	3 274	55 693	308 893	309 969	620 219	'16 248
50 to 99 employees	1	50	3 623	165 309	2 011	4 154	72 424	383 015	327 222	700 594	'19 497
100 to 249 employees	3	54	8 750	372 889	4 970	9 880	164 320	1 055 861	1 041 343	2 074 665	'55 533
250 to 499 employees	—	25	8 287	346 542	4 865	8 936	171 270	833 036	901 804	1 752 828	'31 890
500 to 999 employees	—	11	6 882	317 176	4 044	8 597	151 875	876 427	650 338	1 563 846	'19 136
1,000 to 2,499 employees	—	—	—	—	—	—	—	—	—	—	—
2,500 employees or more	—	—	—	—	—	—	—	—	—	—	—
Administrative records ⁴	9	194	1 517	67 301	815	1 635	29 420	153 658	181 896	332 466	'4 910

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. Data are also included in respective size classes shown.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 5. Industry Statistics by Primary Product Class Specialization: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry or product class code	Industry or primary product class	All establishments ¹	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number ²	Payroll (\$1,000)	Number ²	Hours (1,000)	Wages (\$1,000)				
333911	Pump and pumping equipment manufacturing	487	32 302	1 408 032	18 476	36 715	649 119	3 624 907	3 421 203	7 071 482	'148 724
3339111	Pump and pumping equipment	257	24 535	1 050 699	13 902	28 149	477 752	2 892 308	2 876 860	5 755 073	'118 829
3339115	Parts and attachments for pumps and pumping equipment (except hydraulic fluid power, and air and gas compressors), including locomotive and packaged pumps ..	35	4 552	217 835	2 846	5 047	110 259	588 105	395 003	1 002 006	'22 067

¹Includes establishments with payroll at any time during the year.

²Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6a. Products Statistics: 2002 and 1997

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	Number of companies with shipments of \$100,000 or more	Quantity of production for all purposes	Product shipments	
				Quantity	Value (\$1,000)
333911	Pump and pumping equipment manufacturing	2002.. N 1997.. N	X X	X X	6 493 599 6 116 900
3339111	Pump and pumping equipment	2002.. N 1997.. N	X X	X X	5 062 029 4 650 241
33391111	Domestic water systems (pumps for farm and home use), excluding irrigation pumps	2002.. N 1997.. N	X X	X X	662 114 384 861
3339111110	Domestic water systems (pumps for farm and home use), excluding irrigation pumps ¹	2002.. 32 1997.. 29	X X	X X	662 114 384 861
33391112	Domestic sump pumps (1 hp or less) (including the value of the driver if shipped as a complete unit)	2002.. N 1997.. N	X X	X X	298 356 155 735
3339111220	Domestic sump pumps (1 hp or less) (including the value of the driver if shipped as a complete unit) ¹	2002.. 16 1997.. 14	X X	X X	298 356 155 735
33391113	Oil-well and oil-field pumps, except boiler feed (including the value of the driver if shipped as a complete unit)	2002.. N 1997.. N	X X	X X	652 781 413 340
3339111330	Oil-well and oil-field pumps, except boiler feed (including the value of the driver if shipped as a complete unit) ¹	2002.. 32 1997.. 32	X X	X X	652 781 413 340
33391114	Industrial pumps, except hydraulic fluid power pumps, automotive circulating pumps, and measuring and dispensing pumps	2002.. N 1997.. N	X X	X X	2 784 997 3 368 678
3339111440	Industrial pumps, except hydraulic fluid power pumps, automotive circulating pumps, and measuring and dispensing pumps ¹	2002.. 162 1997.. 156	X X	X X	2 784 997 3 368 678
33391115	Other pumps, except packaged pumps, hand pumps, automotive circulating pumps, locomotive pumps, hydraulic fluid power pumps, measuring and dispensing pumps, and industrial spraying equipment	2002.. N 1997.. N	X X	X X	649 118 327 627
3339111590	Other pumps, except packaged pumps, hand pumps, automotive circulating pumps, locomotive pumps, hydraulic fluid power pumps, measuring and dispensing pumps, and industrial spraying equipment ¹	2002.. 68 1997.. 58	X X	X X	649 118 327 627
3339111Y	Pump and pumping equipment, nsk	2002.. N 1997.. N	X X	X X	14 663 N
3339111YWV	Pump and pumping equipment, nsk	2002.. N 1997.. N	X X	X X	14 663 N
3339115	Parts and attachments for pumps and pumping equipment (except hydraulic fluid power, and air and gas compressors), including locomotive and packaged pumps	2002.. N 1997.. N	X X	X X	1 140 191 1 153 674
33391151	Locomotive fuel lubricating or cooling medium pumps	2002.. N 1997.. N	X X	X X	1 138 560 1 153 674
3339115105	Locomotive fuel lubricating or cooling medium pumps	2002.. 3 1997.. 1	X X	X X	10 026 D
3339115133	Parts and attachments for pumps and pumping equipment (except for hydraulic fluid power, and air and gas compressors), including packaged pumps ¹	2002.. 95 1997.. 97	X X	X X	1 128 534 D
3339115Y	Parts and attachments for pumps and pumping equipment (except hydraulic fluid power, and air and gas compressors), including locomotive and packaged pumps, nsk	2002.. N 1997.. N	X X	X X	1 631 N
3339115YWV	Parts and attachments for pumps and pumping equipment (except hydraulic fluid power, and air and gas compressors), including locomotive and packaged pumps, nsk	2002.. N 1997.. N	X X	X X	1 631 N
333911W	Pump and pumping equipment manufacturing, nsk, total	2002.. N 1997.. N	X X	X X	291 379 312 985
333911WY	Pump and pumping equipment manufacturing, nsk, total	2002.. N 1997.. N	X X	X X	291 379 312 985
333911WYWW	Pump and pumping equipment manufacturing, nsk, for nonadministrative-record establishments	2002.. N 1997.. N	X X	X X	117 607 146 634
333911WYWY	Pump and pumping equipment manufacturing, nsk, for administrative-record establishments	2002.. N 1997.. N	X X	X X	173 772 166 351

¹For additional detail, see Current Industrial Report MA333P, Pumps and Compressors.

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6b. **Product Class Shipments for Selected States: 2002 and 1997**

[Product classes covered are those that are economically significant and whose production is geographically dispersed, provided dispersion is not approximated by data in Table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some states are withheld because they are either less than \$2 million in product class shipments or they disclose data for individual companies in 2002. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographic definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

NAICS product class code	Product class and geographic area	Value of product shipments (\$1,000)
3339111	Pump and pumping equipment	
	United States	2002 .. 5 062 029
		1997 .. 4 650 241
	California	2002 .. 533 470
		1997 .. 489 161
	Colorado	2002 .. 67 583
		1997 .. N
	Florida	2002 .. 85 849
		1997 .. 61 937
	Georgia	2002 .. 73 161
		1997 .. 80 953
	Illinois	2002 .. 326 525
		1997 .. 300 954
	Indiana	2002 .. 93 497
		1997 .. N
	Iowa	2002 .. 86 753
		1997 .. 94 653
	Kansas	2002 .. 71 840
		1997 .. N
	Louisiana	2002 .. 48 691
		1997 .. 16 376
	Massachusetts	2002 .. 70 374
		1997 .. 71 258
	Michigan	2002 .. 68 150
		1997 .. 93 710
	Minnesota	2002 .. 176 405
		1997 .. 303 549
	Missouri	2002 .. 15 903
		1997 .. 17 500
	Nebraska	2002 .. 54 246
		1997 .. 38 049
	New Jersey	2002 .. 22 271
		1997 .. 101 800
	New York	2002 .. 332 075
		1997 .. 344 630
	North Carolina	2002 .. 176 776
		1997 .. 163 712
	Ohio	2002 .. 581 351
		1997 .. 538 900
	Oklahoma	2002 .. 561 194
		1997 .. 438 086
	Oregon	2002 .. 97 388
		1997 .. N
	Pennsylvania	2002 .. 128 940
		1997 .. 185 717
	Tennessee	2002 .. 36 633
		1997 .. 40 880
	Texas	2002 .. 473 343
		1997 .. 351 846
	Wisconsin	2002 .. 363 625
		1997 .. 214 584
3339115	Parts and attachments for pumps and pumping equipment (except hydraulic fluid power, and air and gas compressors), including locomotive and packaged pumps	
	United States	2002 .. 1 140 191
		1997 .. 1 153 674
	Alabama	2002 .. 6 746
		1997 .. 11 406
	California	2002 .. 181 947
		1997 .. 118 297
	Florida	2002 .. 9 311
		1997 .. 2 194
	Illinois	2002 .. 59 753
		1997 .. 73 749
	Indiana	2002 .. 6 072
		1997 .. N
	Louisiana	2002 .. 7 850
		1997 .. 20 585
	Michigan	2002 .. 94 972
		1997 .. 79 823
	New York	2002 .. 140 926
		1997 .. 131 566
	Ohio	2002 .. 28 704
		1997 .. 126 567
	Oklahoma	2002 .. 83 763
		1997 .. 78 917
	Pennsylvania	2002 .. 63 813
		1997 .. 36 738
	Texas	2002 .. 65 469
		1997 .. 50 524
	Wisconsin	2002 .. 41 104
		1997 .. N

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 7. Materials Consumed by Kind: 2002 and 1997

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Material code	Material consumed	Quantity	Delivered cost (\$1,000)
333911	Pump and pumping equipment manufacturing		
00900001	Total materials .....2002..	X	2 917 637
	.....1997..	X	2 888 966
33399601	Fluid power pumps, motors, and hydrostatic transmissions (hydraulic and pneumatic) .....2002..	X	81 929
	.....1997..	X	145 361
33291211	Fluid power valves, hose and tube fittings and assemblies .....2002..	X	7 085
	.....1997..	X	29 210
00190089	Other fluid power products, hydraulic and pneumatic .....2002..	X	1 833
	.....1997..	X	N
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products .....2002..	X	53 432
	.....1997..	X	58 304
33291901	Metal pipe, valves, and pipe fittings (excluding forgings) .....2002..	X	41 401
	.....1997..	X	75 840
33200099	Fabricated structural metal products (excluding forgings) .....2002..	X	116 361
	.....1997..	X	126 327
33200051	Other fabricated metal products (excluding fluid power products and forgings) .....2002..	X	45 623
	.....1997..	X	55 326
33211101	Iron and steel forgings .....2002..	X	32 282
	.....1997..	X	39 186
33211201	Nonferrous forgings .....2002..	X	3 775
	.....1997..	X	9 369
33151001	Iron and steel castings (rough and semifinished) .....2002..	X	359 923
	.....1997..	X	380 128
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished) .....2002..	X	29 177
	.....1997..	X	66 792
33152003	Other nonferrous metal castings, rough and semifinished (including aluminum and aluminum-base alloy).....2002..	X	58 398
	.....1997..	X	115 989
33120007	Steel bars, bar shapes, and plate (excluding castings, forgings, and fabricated metal products) .....2002..	X	90 963
	.....1997..	X	168 062
33120016	Steel sheet and strip (including tinplate) .....2002..	X	9 107
	.....1997..	X	N
33120033	All other steel shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	40 442
	.....1997..	X	17 994
33100077	Other nonferrous shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	15 042
	.....1997..	X	26 177
33100038	Aluminum and aluminum-base alloy shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	5 061
	.....1997..	X	N
33361809	Engines (diesel, semidiesel, gasoline, and other carburetor-type engines).....2002..	X	37 758
	.....1997..	X	41 084
33531211	Fractional horsepower electric motors (less than 1 hp) .....2002..	X	211 430
	.....1997..	X	248 326
33531221	Integral horsepower electric motors and generators (1 hp or more) .....2002..	X	202 414
	.....1997..	X	192 385
33299101	Ball and roller bearings (mounted or unmounted) .....2002..	X	22 202
	.....1997..	X	38 173
32221001	Paperboard containers, boxes, and corrugated paperboard .....2002..	X	34 574
	.....1997..	X	26 744
32600011	Fabricated rubber products (excluding gaskets) .....2002..	X	41 464
	.....1997..	X	26 582
32610011	Fabricated plastics products (excluding gaskets) .....2002..	X	104 767
	.....1997..	X	79 824
33999103	Gaskets (all types), and packing and sealing devices .....2002..	X	66 633
	.....1997..	X	57 502
001900B1	Electrical transmission, distribution, and control equipment .....2002..	X	61 252
	.....1997..	X	106 531
32551002	Paints, varnishes, stains, lacquers, shellacs, japans, enamels, and allied product .....2002..	X	6 447
	.....1997..	X	N
00970099	All other materials and components, parts, containers, and supplies .....2002..	X	823 920
	.....1997..	X	461 913
00971000	Materials, ingredients, containers, and supplies, nsk .....2002..	X	312 942
	.....1997..	X	295 837

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p–10 to 19 percent estimated; q–20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.